

WHAT IS CLAIMED IS:

1. A self-sealing protection filter port connectable to a filter, the filter port comprising:

a housing;

a sealable opening within the housing;

a biasing member disposed within the housing; and

a filter seal connected to the biasing member, wherein the sealable opening is open, and the filter communicates with the opening when the filter is connected to the filter port, and wherein the biasing member is biased to seal the opening when the filter is disconnected from the filter port.

2. The filter port according to claim 1, wherein the filter seal comprises:

a rubber or polymer capable of providing an air- tight seal.

3. The filter port according to claim 1, wherein the filter port further comprises:

an external housing connected to the internal housing at a base to form a closed end.

4. The filter port according to claim 3, wherein the internal housing has at least one air inlet.

5. The filter port according to claim 3, wherein the biasing member is extendable and compressible along a longitudinal axis of the filter port.

6. The filter port according to claim 3, wherein the filter is disposed between the internal housing and the external housing and is retained therebetween by one

selected from a group consisting of: a screwable thread, an interlocking part, a snap-on device, a removable adhesive, and a magnetic retaining device.

7. The filter port according to claim 3, wherein the base includes an "S" cross-sectionally shaped connecting body comprising:

a vertical member;

a first horizontal member extending from a first end of the internal housing disposed at the base to a first end of the vertical member; and

a second horizontal member extending from a first end of the external member at the base to a second end of the vertical member.

8. The filter port according to claim 7, wherein the vertical member, the first horizontal member, and the internal housing form a spring resting area for the compressed spring.

9. The filter port according to claim 8, further comprising:

an O-ring disposed around an outer surface of the internal housing in the spring resting area.

10. The filter port according to claim 8, further comprising:

a valve seat attached to the second horizontal member.

11. The filter port according to claim 9, wherein the valve seat is a single planar member perpendicular to the longitudinal axis of the filter port.

12. The filter port according to claim 9, wherein the valve seat is a biplanar member having a first plane resting on the second horizontal member and a second plane extending parallel to the longitudinal axis of the filter port.

13. The filter port according to claim 11, wherein the filter seal sealably abuts the valve seat and is disposed in parallel to the axis of the first horizontal member.

14. The filter port according to claim 12, wherein the filter seal sealably abuts the valve seat and is disposed in parallel to the axis of the first horizontal member.

15. The filter port according to claim 12, wherein the biasing member is operationally connected to the valve seat and the filter seal, the biasing member preventing entry of ambient air through an air inlet.

16. The filter port according to claim 15, wherein the spring member is connected to the valve seat and the filter seal to form a movable seal that prevents entry of ambient air through an air inlet.

17. The filter port according to claim 16, wherein the filter seal travels along the longitudinal axis with the biasing member of the filter port relative to the base and reaches a resting location that sealably prevents ambient air from entering the opening when the filter is disengaged from the filter port.

18. The filter port according to claim 17, wherein the filter seal forms the movable seal at a resting location when the biasing member attains a maximum point of expansion.

19. The filter port according to claim 18, wherein the biasing member is compressed when the protection filter is connected to the filter port.

20. The filter port according to claim 1, wherein the filter is installable in a filter port protrusion on a gas mask.